91-04128/

CONTENTS

Acknowledgements 3
Executive Summary 4
Introduction 7
Section I **Orientation of International Business Activity** 9
1.1 Size and Market Orientation of B.C. Business in International Activity 10
1.2 Expected Growth in International Business Activity 12
Section II **International Business Employment Requirements** 14
2.1 Demand for Post-Secondary Business Graduates 15
2.2 Distribution of International Business Jobs by Activity 17
2.3 Evaluating the Demand for International Business Graduates 18
2.4 Estimating Growth in the Number of International Business Related Jobs .. 20
Section III **International Job Specifications** 22
3.1 Importance of Experience, Education and Educational Focus Factors 23
3.2 Importance of Skills, Knowledge and Personal Qualities 25
3.3 Evaluating the Applicability of Post-Secondary Int'l Business Programs .. 27
3.4 Opinions about Co-operative and Continuing Education Programs 28
Section IV **Implications for the B.C. Post-Secondary System** 29
4.1 Curriculum Issues 30
Methodology 31
Appendix 1 34

CHARTS

Chart 1-1A International Business Activity as a Percent of Total Business 10
Chart 1-1B Market Orientation of International Business Activity 11
Chart 1-2 Expected Growth in International Business in Next 2 Years by Market Orientation 13
Chart 2-1 Percent of Firms Employing Workers in Selected Occupations 17
Chart 2-3 Expected Employment Trends % Up Significantly: Own Firm & Industry 19
Chart 2-4 Percent of Firms Intending to Fill an International Job in the Next Year 21
Chart 3-1A Type of Experience - Proportion of Respondents with Opinions 23
Chart 3-1B Type of Academic Program - Proportion of Respondents with Opinions 24
Chart 3-2 Importance of Skills, Knowledge and Personal Qualities 25

TABLES

Table 1-2 Projected Trends in International Business Activity 12
Table 2-1 Percent of Respondents Indicating that Post-Secondary Graduates would be an Asset 16
Table 2-3 Expected Growth over Next 2 Years by Size of Organization 18
Table 3-2 Two Most Important Qualifications by Job Type 26
Table 3-3 Opinions About the Relative Importance of International Education Programs 27

ACKNOWLEDGEMENTS

The *International Business Survey*, commissioned by the Ministry of Advanced Education, Training and Technology, was undertaken to provide the Ministry with additional information about the requirements of the business community with respect to the educational programs associated with international business activity in British Columbia.

The *International Business Survey* was produced under the direction of Anne Burch, Manager, Universities, Colleges and Institutes Division; Ministry of Advanced Education, Training and Technology. The development and administration of the survey was undertaken by Michael Sharzer of the Business Administration Department, Vancouver Community College, while the completion of the research project was reflective of the efforts of Advisory Committee members, as follows:

Glen Bonderud	Manager, MacMillan Bloedel Ltd.
Zen Burianyk	Sr. Trade Commissioner, Dept. of Industry, Science and Technology
Judy Dallas	Manager, B.C. Ministry of Education
Dale Harvey	Director, B.C. Trade Development Corporaton
Keith Gray	Vice-President, Business Council of B.C.
Thomas Stu Mathieson	General Manager, Administration, Cominco Ltd.
Louise May	Academic Director, Capilano College
Jim O'Hara	Director, World Trade Centre
Gregg Saretsky	Manager, Canadian Airlines International Ltd.
Dan Wong	Coordinator, Dairyland Foods Ltd.

Michael Sharzer was responsible for the design, pre-testing, administration, tabulation and preliminary analysis of the survey information, and acted as the principle consultant responsible for the general development of the survey instrument. Anne Burch and Robert Malatest, Ministry of Advanced Education, Training and Technology, assisted in the analyses of the survey results and the development of the final report.

Support was provided by students, faculty, and staff of Vancouver Community College including: Murray Besler, Cheryl McKeeman, Kelly Schuler, Jack Yensen and Carol Mitton. In addition, considerable support was provided by Joachim Knauf, Canada Employment and Immigration Commission.

Judging by the enthusiasm and concerns of those individuals and organizations contacted, there is significant interest in international business education throughout British Columbia. Without the participation and cooperation of these people, this research could not have been completed.

EXECUTIVE SUMMARY

Highlighted below are the major findings of the *International Business Survey* conducted from September 1989 to March 1990.

- On average, almost half (47.5%) of the international business activity among the firms surveyed was with the United States, followed by the Asia-Pacific market (27.3%) and European countries (9.8%). Based on the information provided in the survey, it appears that there will be only a modest change in the regional focus of international business activity over the next two years.

- Overall, more than three-quarters of respondents thought that their international business activity would increase over the next two to five years. Almost half (46.2%) expected their activity to be up significantly in the next five years.

- Firms engaged in international business activity indicated that their primary requirement for post-secondary graduates was in sales, as 70.3% of respondents felt that post-secondary graduates would be an asset in either entry or advanced level sales positions. The next highest demand was in finance/accounting occupations (53.4%), followed by other marketing jobs (44.6%). This demand by occupation is consistent with the distribution of jobs that persons in the international business fields are currently engaged in. A relatively lower proportion of respondents cited the utility of such graduates in their communications/public relations departments, purchasing, production/quality control or transportation/documentation departments.

- In all cases, respondents felt that international business graduates would be a greater asset in advanced level positions rather than entry level positions. However, a significant proportion of firms cited the need for entry level graduates in their sales, finance/accounting and transportation/documentation departments.

- Firms engaged in international business activity expected that employment in their organizations will increase moderately in the next two years. Of the 249 organizations surveyed, 48.6% indicated that they expected their employment to increase slightly and 13.6% expected their employment to increase significantly during the next two years. Only 2.8% of firms thought that their employment would decline during the same period. Firms were even more optimistic about employment prospects over the next five years.

- In terms of experience to gain employment, general business experience and specific business function experience are slightly more important than international business or technical/vocational experience.

- Respondents exhibited considerable optimism with respect to the further growth of international business jobs, with the number of such jobs expected to grow at the same rate as in the previous two years. Businesses anticipate hiring one part-time employee for every two full-time positions filled. About one-third of the new jobs will be at the entry level.

- In terms of the most appropiate fields of study, respondents attached slightly more importance to general business, and specific business functions than to international business and technical/vocational fields of study.

- Organizations perceived the personal qualities of initiative/drive and willingness to learn as the most important attributes, closely followed by oral and written communication skills and adaptability. Knowledge of international business practices and foreign languages and customs were relatively less important.

- The most important attributes for the major international job occupations (sales, other marketing, finance/accounting and transportation/documentation) were willingness to learn and technical knowledge.

- Respondents also attached considerable importance to employees having some post-secondary education. While only 8.7% of respondents indicated that a Master's degree was required for an international business job, the proportion of respondents who noted the requirement for a Bachelor's degree (28.7%) or college diploma (23.3%) was considerably higher.

- Respondents preferred applied programs emphasizing job related skills and knowledge over general theory, continuing education, local co-operative or international co-operative education courses to prepare students to enter the international work force.

Analysis of the results suggests the following implications for the B.C. post-secondary system:

- The demand for graduates with appropriate skills required for international business occupations will continue to grow. It is expected that there could be a 15% increase in international business related employment over the next 12 months. In general, firms with between $0.5 million and $10 million in sales were the most optimistic of increasing sales and as a consequence, were also the most optimistic about hiring new employees.

- Considerable importance was placed on employees having some post-secondary education. Approximately one-quarter of all employers indicated that the minimum education requirement was either a Bachelor's degree (28.7%) or a college diploma (23.3%). Only 8.7% of respondents indicated a requirement for a Master's degree.

- Although the U.S. remains the primary market orientation, commensurate emphasis in the business curriculum to prepare students with an adequate knowledge and understanding of Pacific Rim activities would be an asset.

- Given that the majority of firms indicated a need for graduates in sales and finance/accounting occupations, there is considerable scope to enhance programs that prepare students for these occupations.

- Applied programs emphasizing job related skills and knowledge were deemed the most appropriate to prepare students to enter the international business work force. While general theory and co-op programs ranked second and third respectively, there is considerable scope to enhance business programs with the inclusion of job related skills and knowledge.

- Although less than ten percent of employers thought that international or local co-operative education programs were of primary or secondary importance when compared to other educational programs, a significant proportion (24.1%) of firms indicated that they would likely hire one or more co-operative education students.

- Notwithstanding the expected increase in international business related jobs, employers indicated a preference for post-secondary graduates with well developed general business skills or specific business function skills rather than training focused solely on international business or technical/vocational specializations.

- Although respondents emphasized the importance of "personal" qualities such as initiative/drive, willingness to learn and adaptability, there is considerable scope to enhance international business graduates' employment prospects by ensuring that the curriculum contains sufficient instruction in general business knowledge and an understanding of computers. In addition, the importance of good oral and written communication skills should be emphasized. Respondents assigned relatively less importance to knowledge of foreign practices, customs and languages.

INTRODUCTION

The *International Business Survey* initiated by the Ministry of Advanced Education, Training and Technology was commissioned so that the Ministry could become more cognizant of the attitudes toward, and demand for, international business education courses among employers in British Columbia. The primary objective of this research was to provide additional information which would assist the Ministry in the development of international business education programs that would adequately address the needs of British Columbia's business community.

The research plan, formulated jointly by the project consultant, Ministry officials, and an Advisory Committee, sought to fulfill three primary survey objectives as well as meet statistical research requirements to ensure the validity of the results obtained. The primary objectives of the survey were:

1. *To determine the potential demand for international business graduates over the next two to five years.*

2. *To identify the knowledge, skills and qualifications required by post-secondary business graduates to effectively operate in international business activities.*

3. *To identify the implications for British Columbia's post-secondary education system.*

Based on the need to obtain detailed information from businesses throughout British Columbia, it was decided that the aforementioned objectives would be best secured through a mail-out survey of organizations likely to be engaged in international business activity. The survey population consisted of firms in 15 employment sectors including exporters, trading houses, finance, transportation and other service oriented firms and organizations.

After the distribution of a covering letter via facsimile, survey questionnaires were mailed to 991 organizations in February, 1990. Excluding the 60 respondents who had moved or discontinued operations, as well as 96 respondents who were incorrectly identified as having international business activity, 387 of the 835 eligible businesses replied to the survey - a response rate of 46.3%. Of the 387 companies that responded, however, only 249 indicated that they were engaged in, or were planning to enter into, international business activity. The results presented in this report are based on the responses provided by those 249 businesses. Readers are encouraged to consult the Technical Aspects section for additional information pertaining to research methodology, sample characteristics and survey delivery.

This report consists of four principle sections. Examined in the first section is the extent and orientation of international business activity among organizations in British Columbia engaged

in, or planning to enter into, international business activity. This data provides an overview of the potential for future growth in international business as perceived by the business community. In the second section of the report, the employment characteristics and opportunities associated with international business activities are evaluated. Respondents were asked to comment on the relevance and overall importance of a variety of skills and educational attributes as they relate to international business occupations. In the third and fourth sections, the implications for B.C.'s post-secondary education system are included. Whereas in the third section the appropriateness of educational programs are commented upon, the fourth section represents a synthesis of the survey findings and allows for the identification of several potential implications for the B.C. post-secondary education system.

The design of the survey allowed for an evaluation of differences in opinion on the basis of firm size (sales, number of employees) and international business orientation (American, Asia-Pacific, other). It must be emphasized that the findings of this survey represent a "snapshot" of businesses engaged in international business activities in British Columbia as of early spring, 1990. As such, this depiction could be subject to change should issues related to international trade become more prominent during the coming years.

SECTION I: ORIENTATION OF INTERNATIONAL BUSINESS ACTIVITY

Objective:

This section of the survey was designed to determine the size and market orientation of B.C. firms engaged in international business activity. Respondents were asked to indicate the proportion of their total business that consisted of international business activity. In addition, participants were asked to project changes in the level of their international business activity and the market orientation of this business.

The format of this section of the survey consisted of both open and closed ended questions, and provision was made for respondents to include additional information and comments.

SECTION 1.1: SIZE AND MARKET ORIENTATION OF B.C. BUSINESSES IN INTERNATIONAL ACTIVITY

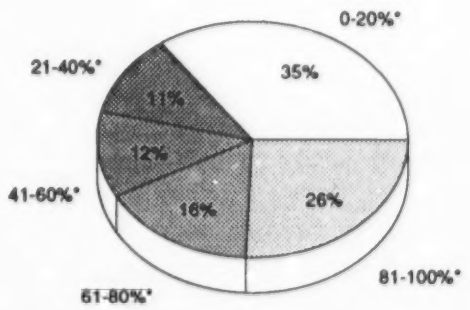
To determine the overall importance of international activity among B.C. organizations, respondents were asked to detail the proportion of their total business activity that involved international business, as well as to identify trends in international business with respect to growth and market orientation (United States, Asia-Pacific, Australia-New Zealand, Europe or other).

- The results of the survey suggest that firms engaged in international business have considerable domestic (B.C. or Canada) market exposure. Of 249 organizations that stated an involvement in international business activity, approximately half (52.8%) indicated that international business accounted for less than 50% of their total business activity.

- About 20% of firms indicated that more than 90% of their business activity was in international business markets.

- Highlighted in Chart 1-1A is the share of international business activity for the sample as a whole. More than one-third (34.9%) of businesses surveyed indicated that international business activity accounted for 20% or less of their total business. Slightly more than one-quarter (25.7%) of firms noted that international business represented more than 80% of total revenues.

CHART 1-1A
International Business Activity as a Percent of Total Business*



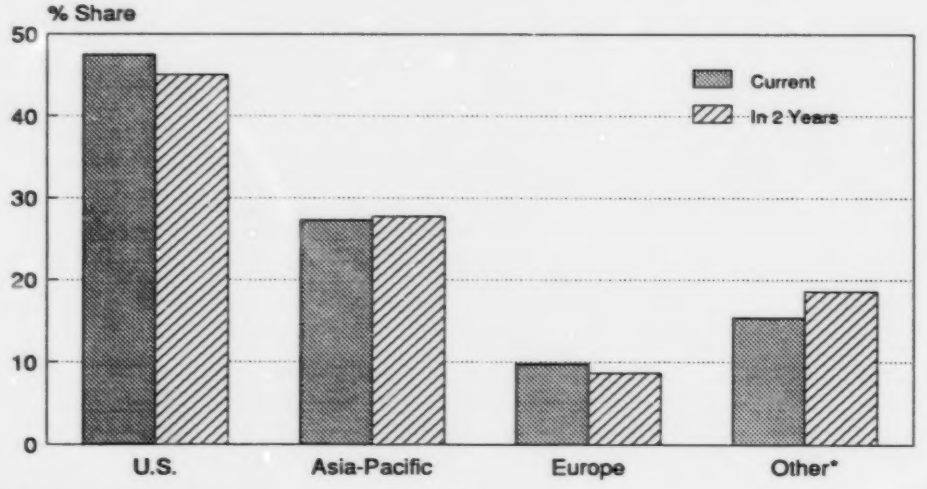
N=249

- As highlighted in Chart 1-1B, almost half (47.5%) of the international business activity was with the United States. In comparison, the shares accounting for the Asia-Pacific (excluding Australia and New Zealand), European and other markets were 27.3%, 9.8% and 15.4% respectively.

- It should be noted that the proportion of business activity identified in the survey is compatible with actual B.C. export shares. In 1989, the U.S. accounted for 41% of total B.C. exports followed by 38% for Asia-Pacific, 15% for Europe and 6.0% for other regions.

- Overall, respondents felt that there would be little change in the market orientation of their international business activity over the next two years.

CHART 1-1B
Market Orientation of International Business Activity-Current & in 2 Years



*Includes Asia, Africa, S. America, Australia and New Zealand

n=249

1.2: EXPECTED GROWTH IN INTERNATIONAL BUSINESS ACTIVITY

Respondents were asked to estimate the trend in their international business activity and indicate the extent to which they anticipate such activity to increase or decrease during the next two to five years.

- Overall, more than three-quarters of respondents thought that their international business activity would expand slightly or significantly during the next two to five years.

- As highlighted in Table 1-2, approximately one-half of the organizations surveyed felt that their international business activity would increase slightly in the next two years and significantly in the next five years. Less than two percent of all respondents indicated that their international business would decline during the same periods.

TABLE 1-2
Projected Trends in International Business Activity

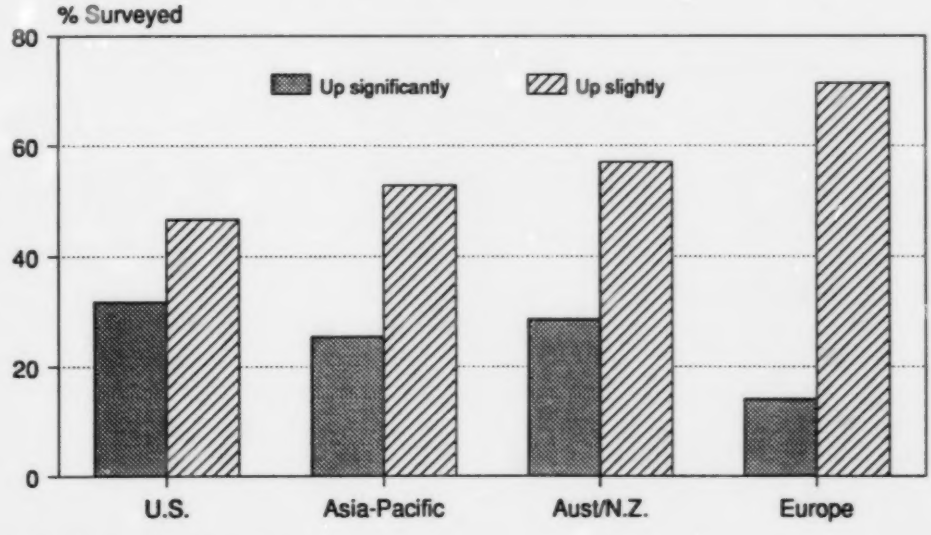
Trend	Next 2 Years	Next 5 Years
Down significantly	0.4%	0.0%
Down slightly	1.2%	1.2%
About the same	18.5%	9.6%
Up slightly	47.4%	30.1%
Up significantly	28.1%	46.2%
Cannot estimate/no response	4.4%	12.8%
% Up slightly/significantly	75.5%	76.3%

n=249

- It is interesting to note the differences in opinion with respect to the market orientation of the organizations surveyed. For example, as highlighted in Chart 1-2, a large proportion of firms with more than 50% of their international business activity with the U.S. or Asia-Pacific expect to expand significantly during the next two years. In comparison less than 15% of firms that conduct more than half of their international business in European markets expect to expand significantly.

- Readers should interpret data for Europian and Australia-New Zealand markets with caution as the number of firms that had more than half of their international business in these regions was very small (less than 10 firms for each region).

CHART 1-2: Expected Growth in International Business in Next 2 years by Market Orientation*



*Firm has 50% or more of international business with the market region

N=177

SECTION II: INTERNATIONAL BUSINESS EMPLOYMENT REQUIREMENTS

Objective:

The focus of this section was to evaluate the human resource issues associated with international business activity. In this section, organizations were asked to detail the specific occupations and skill sets required for their particular business. In addition, respondents were asked to identify current and projected employment requirements as related to international business occupations.

The prime objective of this section was to enable the Ministry to more accurately assess both the demand for post-secondary business graduates and the training and qualifications required to work effectively in an "international" job in the B.C. business community.

2.1: DEMAND FOR POST-SECONDARY BUSINESS GRADUATES

Aside from identifying projected trends in their international business activity, respondents were asked to identify in which areas, if any, post-secondary graduates would be an asset.

- As highlighted in Table 2-1, firms engaged in international business activity indicated that their primary requirement for post-secondary graduates was in the area of sales, as 70.3% of respondents felt that post-secondary graduates would be an asset in either entry or advanced level positions. The next highest demand was in finance/accounting occupations (53.4%), followed by other marketing jobs (44.6%).

- In contrast, a lower proportion of respondents cited the utility of such graduates in their communications/public relations departments (24.5%), purchasing (26.1%), production/quality control (27.7%) or transportation/documentation (39.0%) departments.

- In all cases, a larger proportion of organizations cited the need for post-secondary graduates in advanced rather than entry level positions.

TABLE 2-1
Percent of Respondents* Indicating that Post-Secondary Graduates would be an Asset By Job Function

	% OF RESPONDENTS
Sales	
Entry	34.5%
Advanced	59.0%
Entry and/or Advanced	70.3%
Finance and Accounting	
Entry	29.7%
Advanced	42.2%
Entry and/or Advanced	53.4%
Other Marketing	
Entry	18.1%
Advanced	35.7%
Entry and/or Advanced	44.6%
Transportation/Documentation	
Entry	26.9%
Advanced	27.7%
Entry and/or Advanced	39.0%
Production/Quality Control	
Entry	15.7%
Advanced	21.3%
Entry and/or Advanced	27.7%
Purchasing	
Entry	12.0%
Advanced	19.7%
Entry and/or Advanced	26.1%
Communicatons/Public Relations	
Entry	12.9%
Advanced	17.7%
Entry and/or Advanced	24.5%

n=249

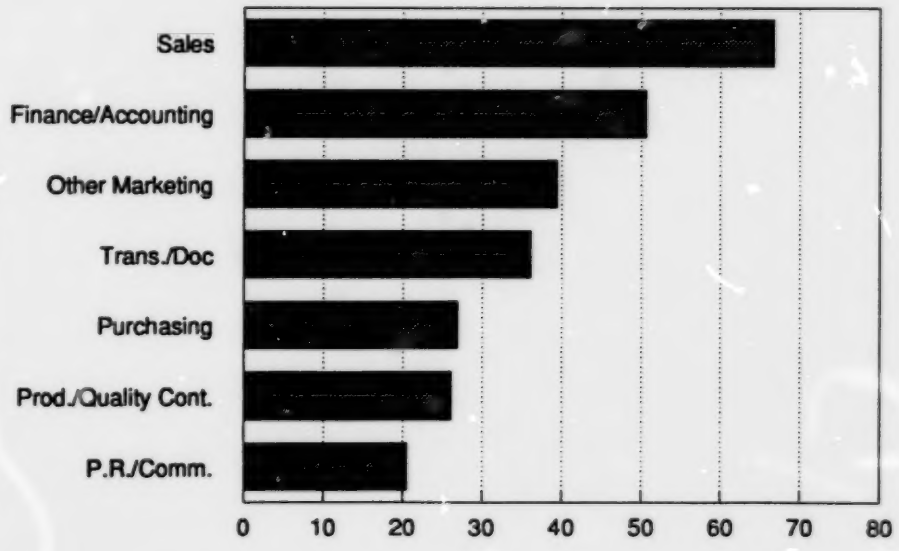
* A firm is only counted once even if jobs in both entry and advanced levels were identified.

2.2: DISTRIBUTION OF INTERNATIONAL BUSINESS JOBS BY ACTIVITY

Respondents were asked to detail the number of employees currently working in an international business related activity. Given that often one establishment could account for a disproportionately large number of jobs, analysis of the distribution of the absolute number of jobs in each category could be subject to considerable variation. In this context, analysis was undertaken on the proportion of firms that had persons employed in international business jobs, rather than the total number of jobs in each category.

- As highlighted in Chart 2-1, there were significant differences in the types of jobs international business employees are currently engaged in. For example, although two-thirds (66.7%) of all firms surveyed had employees working in sales positions, only 20.5 % of respondents indicated that they had employees working in communication/public relations jobs that were related to their international business activities.

CHART 2-1
Percent of Firms Employing Workers in Selected Occupations



n=249

2.3: EVALUATING THE DEMAND FOR INTERNATIONAL BUSINESS GRADUATES

Participants were asked to estimate their employment requirements over the next two to five years. The results of the survey indicate:

- Firms engaged in international business activity expected that employment in their organizations will increase moderately over the next two years. Of the 249 organizations surveyed, 48.6% indicated that they expected their employment to increase slightly and 13.6% expected their employment to increase significantly during the next two years. Only 2.8% of firms surveyed thought that their employment would decline during the same period.

- As highlighted in Table 2-3, there were considerable differences in employment projections on the basis of the size of the firm. In general, it appears that smaller firms (with sales of less than $10 million) were more optimistic about increasing sales than were larger firms. However, with the exception of firms with sales of between $10 and $50 million, the majority of firms in all sales groups believed that total employment in their industry would increase slightly or significantly in the next 2 years.

TABLE 2-3
Expected Growth over Next 2 Years by Size of Organization

Firm Size/Employment Outlook	Down Slightly/ Significantly	About the Same	Up Slightly/ Significantly	Cannot Estimate
$0 - .5M	3.1%	34.4%	62.5%	0.0%
$.5 - 2M	0.0%	19.5%	80.5%	0.0%
$2 - 10M	1.9%	28.3%	67.9%	1.9%
$10 - 50M	3.2%	48.4%	41.9%	6.5%
$50M +	12.5%	28.1%	59.4%	0.0%
Unknown	0.0%	28.2%	69.2%	2.6%
Average	3.1%	30.3%	64.9%	1.8%

n = 228

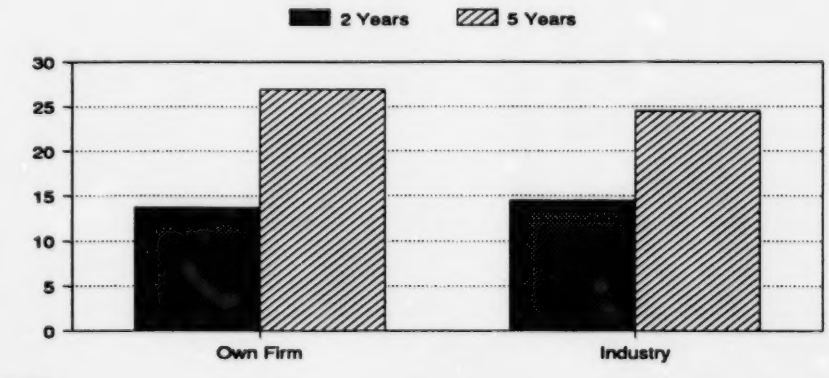
- An analysis was undertaken of employment growth by market orientation of firms. The data reveals that there were no statistical differences in employment growth by current market orientation of the firms. For example, when comparing projected employment growth among firms that conduct more than half of their business in a particular market (eg. U.S., Asia-Pacific, Europe or

other), there were no significant differences in the projections of employment growth for these firms. It should be noted, however, that this analysis excluded approximately 50 firms (25% of the sample) that did not focus on any one particular market (eg. share of business activity in any geographic market did not exceed 50% of the firm's total activity).

- A similar analysis was conducted based on employment by "exposure" of firms to international business activity. Consistent with the results obtained above for market orientation, there were no significant differences in employment growth among firms whose international business accounted for varying proportions of total business activity. There were no statistical differences in employment projections based on whether international business activity accounted for 0 - 30%, 31 - 70% or more than 70% of an organization's total business activity.

- Firms were even more optimistic when asked to comment on their long term (next five years) outlook. As highlighted in Chart 2-3, almost twice as many respondents thought that their employment would increase more significantly in the long term (next five years) as compared to the next two years. There was little difference in opinion with respect to respondents' assessments of their own firms compared to the industry as a whole.

CHART 2-3
Expected Employment Trends
% Up Significantly: Own Firm & Industry



2.4: ESTIMATING THE GROWTH IN THE NUMBER OF INTERNATIONAL BUSINESS RELATED JOBS

All organizations were asked to comment on the number of international business positions they expect to fill during the next two years. Information obtained from the survey indicates that:

- More than half (55.0%) of the businesses surveyed expect to hire at least one person for a full or part-time international job position in the next year. On average, businesses anticipate hiring one part-time employee for every two full-time positions filled.

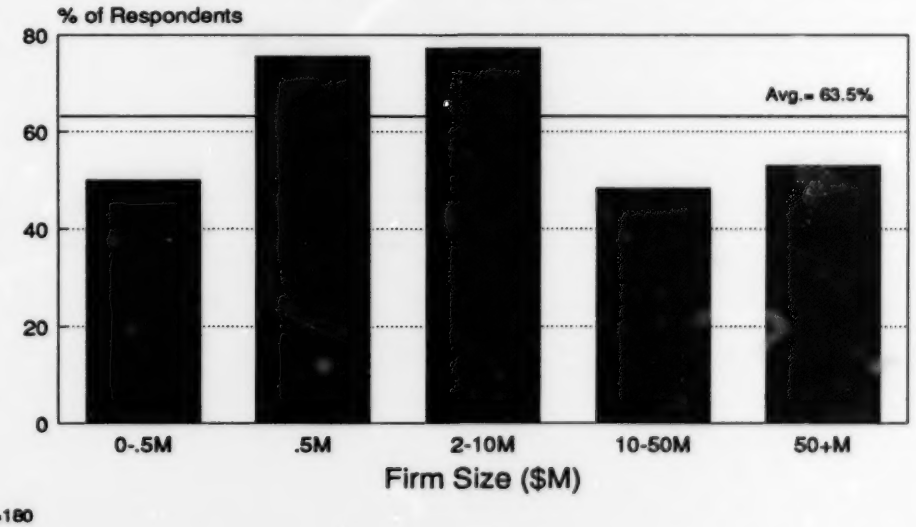
- Respondents expect to hire persons for approximately 620 full-time positions and 270 part-time positions in the next year. As the sample coverage varies by employment sector (eg. all exporters and large companies surveyed, but only a sample of smaller firms), it would be difficult to accurately project the total increase in hiring for all of British Columbia. However, based on a review of respondents' hiring patterns over the last two years, it appears that international business hirings (including new positions and replacements for current employees) could increase by approximately 15 percent in the next year.

- About one-third (37.3%) of new international business jobs will be at the entry level, consistent with the current distribution of international jobs between entry level and advanced level positions.

- It should be noted that there was little difference in hiring intentions on the basis of the market orientation of the firm. For example, whereas 55.6% of firms that traded primarily with the U.S. (50.0% or more of international business with the U.S.) indicated that they would be hiring one or more full-time or part-time employees, only a slightly higher proportion (62.7%) of firms with an Asia-Pacific focus indicated that they would be hiring any additional employees in the next twelve months.

- Although there was little difference in hiring intentions on the basis of market orientation, it appears that medium-size companies (ranging from $0.5M to $10M in sales) expect to experience the highest growth as more than three-quarters of these medium-sized companies indicated that they intended to hire at least one person during the next 12 months. As highlighted in Chart 2-4, although more than half of all companies in each sales cohort expected to hire additional employees, employment prospects in the small (less than $0.5M in sales) and large ($10M+) companies were considerably below that of medium sized companies.

CHART 2-4: Percent of Firms Intending to Fill an International Job in the Next Year by Firm Size



n=180

SECTION III: INTERNATIONAL JOB SPECIFICATIONS

Objective:

In this section, respondents were asked to evaluate the importance of educational attributes and other qualifications with respect to international business occupations. In addition, participants were asked to rate the relevance of various post-secondary international business programs (eg. academic theory courses, co-operative education programs etc.) and the feasibility of utilizing co-operative education programs.

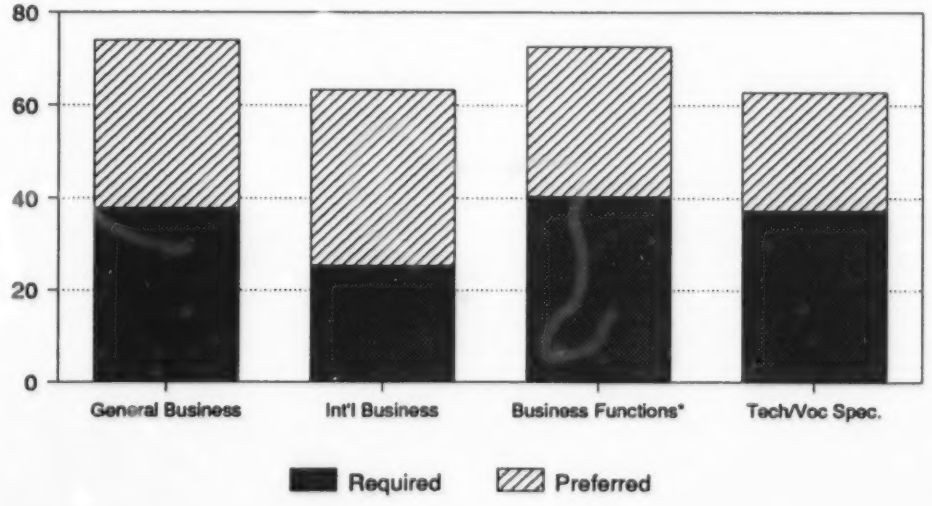
3.1: IMPORTANCE OF EXPERIENCE, EDUCATION AND EDUCATIONAL FOCUS FACTORS

- Respondents were asked to rate 13 experience, education and educational focus factors using the following scale:

  1 = Required
  2 = Preferred
  3 = Somewhat necessary
  n/n = Not necessary

- As highlighted in Chart 3-1A, in terms of experience, respondents noted that general business experience and specific business function experience are slightly more important than international business and technical/vocational experience for employment in their organizations.

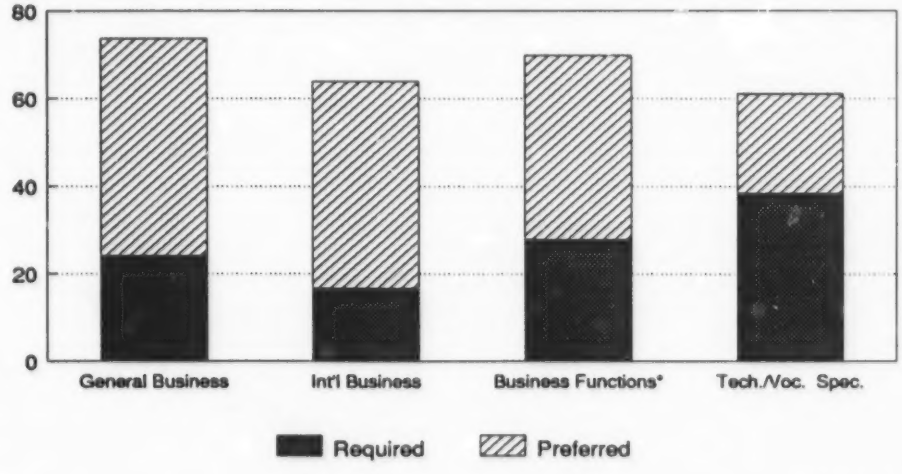
CHART 3-1A
Type of Experience
Proportion of Respondents with Opinions



*Marketing, Finance etc.

- Respondents were asked to comment on the appropriateness of identified fields of study (business in general, international business, specific business functions including marketing and finance, and technical/vocational specialization). As highlighted in Chart 3-1B, respondents attached slightly more importance to general business, followed by an understanding of specific business functions (finance, marketing etc.) than to other fields of study. However, when these factors were ranked in terms of a requirement to obtain employment, specific technical/vocational studies was deemed to be the most important.

CHART 3-1B
Type of Academic Program
Proportion of Respondents with Opinions



* Marketing, Finance etc.

n= 164 to 182

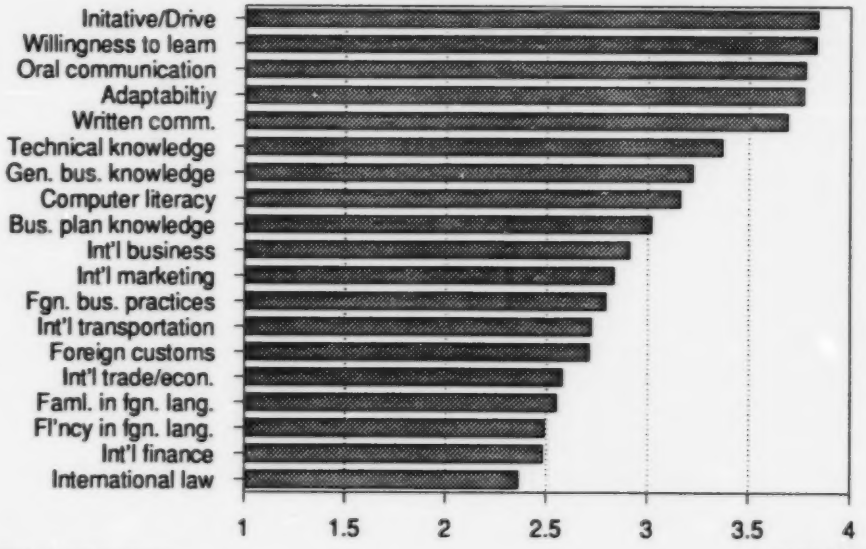
- Respondents also attached considerable importance to employees having some post-secondary education. While only 8.7% of respondents indicated that a Master's degree was required for an international business job, the proportion of respondents who noted the requirement for a Bachelor's degree (28.7%) or college diploma (23.3%) was considerably higher.

3.2: IMPORTANCE OF SKILLS, KNOWLEDGE AND PERSONAL QUALITIES

Respondents were asked to rate the importance of identified skills (written, oral communication, business plan preparation, computer literacy), knowledge (understanding of international business and law, foreign customs and practices etc.) and personal qualities (willingness to learn, initiative, adaptability etc.).

- As highlighted in Chart 3-2 on a mean (or average) score basis,(4 = required, 1 = not necessary), organizations viewed the personal qualities of initiative/ drive and willingness to learn as the most important attributes, followed closely by oral and written communication skills and adaptability. Lesser importance was assigned to knowledge of foreign languages and customs, international finance and international law.

CHART 3-2
Importance of Skills, Knowledge and Personal Qualities - Mean Score Basis*



*4=Required, 1=not necessary

n=172 to 221

- Respondents were also asked to explicitly rank the two most important factors considered to be the most conducive toward the effectiveness of an employee in the four largest international job occupations. Highlighted in Table 3-2 are the selections for the various types of international business occupations. As the number of responses for purchasing, production/quality control and public relations/communications was below 10, data for these positions have not been included.

TABLE 3-2
Two Most Important Qualifications by Job Type

Qualification (% of responses)

Largest Job Occupations	Top Two Responses	
Sales	Willingness to learn	(20.2%)
	Technical knowledge	(16.9%)
Other Marketing	Willingness to learn	(15.4%)
	Technical knowledge	(15.4%)
Finance/Accounting	Willingness to learn	(18.8%)
	Technical knowledge	(18.8%)
Transportation/Documentation	Willingness to learn	(29.2%)
	Technical knowledge	(20.8%)
Total	**Willingness to learn**	**(15.9%)**
	Technical knowledge	**(15.9%)**

n=201

3.3: EVALUATING THE APPLICABILITY OF POST-SECONDARY INTERNATIONAL BUSINESS PROGRAMS

Respondents were asked to rank, from the following list, the types of programs that they felt would best prepare students for international business jobs in their organization. (1 - most important to 6 - least important):

1. *Academic Programs - covering theory and fundamentals of a discipline*
2. *Applied Programs - emphasizing job related skills and knowledge*
3. *Local Co-operative Education Programs*
4. *International Co-operative Education Programs*
5. *International Exchange Programs*
6. *Continuing Education Programs*

An analysis of the data suggests that:

- A large proportion (41.7%) of respondents felt that Applied Programs, emphasizing job related skills and knowledge, were the most appropriate for students preparing to enter the international business work force. Respondents also indicated a preference for academic programs (32.0%).

- Highlighted in Table 3-3 are respondents' opinions with respect to the utility of the various post-secondary programs on a first choice, and first and second choice basis, for the six aforementioned international education programs. It should be noted that the data has not been weighted on the basis of size of firm or number of international jobs.

TABLE 3-3
Opinions About the Relative Importance of International Education Programs
(% of Respondents)

Program	First Choice	First and Second Choice
Applied Programs	41.7%	67.5%
Academic Programs	32.0%	49.6%
Continuing Education	12.7%	31.6%
International Co-operative Programs	6.6%	15.8%
Local Co-operative Programs	3.9%	17.1%
International Exchange Programs	3.1%	10.5%

n=228

3.4: OPINIONS ABOUT CO-OPERATIVE AND CONTINUING EDUCATION PROGRAMS

- When asked whether they would consider hiring co-op students, almost one-quarter (24.1%) of the 249 organizations surveyed indicated that they would likely hire co-operative education students. Of the remaining 189 organizations, 27.3% indicated that they would not hire co-op students, while 27.3% were unsure or did not respond (7.6%).

- With respect to employer support for continuing education courses, a significant proportion indicated that they would be willing to pay all tuition fees (45.0%), or pay part of tuition fees (49.8%). However, while employers were less inclined to provide substantial (12.4%) time away from their job, almost three-quarters (76.8%) would grant employees some time away from their jobs to attend such courses.

SECTION IV: IMPLICATIONS FOR THE B.C. POST-SECONDARY SYSTEM

Objective:

The focus of this section is to evaluate the major implications of the results of the International Business Survey.

4.1: CURRICULUM ISSUES

Analysis of the results suggests the following implications for the B.C. post-secondary system:

- The demand for graduates with appropriate skills required for international business occupations will continue to grow. It is expected that there could be a 15% increase in international business related employment in the next 12 months. In general, firms with between $0.5 million and $10 million in sales were the most optimistic of increasing sales and as a consequence, were also the most optimistic about hiring new employees.

- Considerable importance was placed on employees having some post-secondary education. Approximately one-quarter of all employers indicated that the minimum education requirement was either a Bachelor's degree (28.7%) or a college diploma (23.3%). Only 8.7% of respondents indicated a requirement for a Master's degree.

- Although the U.S. remains the primary market orientation, commensurate emphasis in the business curriculum to prepare students with an adequate knowledge and understanding of Pacific Rim activities would be an asset.

- Given that the majority of firms indicated a need for graduates in sales and finance/accounting occupations, there is considerable scope to enhance programs that prepare students for these occupations.

- Applied programs emphasizing job related skills and knowledge were deemed the most appropriate to prepare students to enter the international business work force. While general theory and co-op programs ranked second and third respectively, there is considerable scope to enhance business programs with the inclusion of job related skills and knowledge.

- Although less than ten percent of employers thought that international or local co-operative education programs were of primary or secondary importance when compared to other educational programs, a significant proportion (24.1%) of firms indicated that they would likely hire one or more co-operative education students.

- Notwithstanding the expected increase in international business related jobs, employers indicated a preference for post-secondary graduates with well developed general business skills or specific business function skills rather than training focused solely on international business or technical/vocational specializaions.

- Although respondents emphasized the importance of "personal" qualities such as initiative/drive, willingness to learn and adaptability, there is considerable scope to enhance international business graduates' employment prospects by ensuring that the curriculum contains sufficient instruction in general business knowledge and an understanding of computers. In addition, the importance of good oral and written communication skills should be emphasized. Respondents assigned relatively less importance to knowledge of foreign practices, customs and languages.

METHODOLOGY

Outlined below is the research methodology used by the Consultant in undertaking the International Business Survey.

Population

The population was defined as business or other organizations operating in B.C., involved in, or potentially involved in, International Business activity.

This population was stratified into 15 employment sectors (Appendix 1), and lists were developed or obtained for each sector. The total population was 5338 employers operating in B.C. Much preliminary work was necessary to develop these lists of the members in each sector.

The lists, in most cases, are imperfect: they include organizations that are not part of the ultimate target population, in so far as they have no present or planned International Business activities. The lists are also, in most cases, not the complete collection of all the organizations that are part of the target population.

The former problem was dealt with by instructing organizations not involved in International Business to indicate this on Question 1 and return the survey. This information was also obtained in the follow-up phone calls. Thus, an estimate is possible of the proportion in each sector of organizations not involved in International Business. The latter shortcoming is inevitable and could bias the results of the survey. However, most lists used were updated in the last year and no list was more than 2 years old.

Sample

A systematic sample was drawn from each employment sector (Appendix 1). In addition, for certain sectors a sample of the largest organizations was identified and all of these organizations were included in the sample. The total sample was 895 organizations.

Survey Technique

A preview letter was faxed or mailed to the chief executive of every employer in the sample. Names, titles and addresses for most chief executives were verified by telephone. Occasionally the organization requested that the survey be forwarded to a particular person other than the chief executive. After a day or two, the survey, with a covering letter and stamped self-addressed return envelope was mailed. Approximately two weeks after this initial mailing all organizations

who had not yet responded were telephoned. Their response to this call was recorded on a follow-up form. One or two weeks later another call was made to organizations that had still not returned the survey. During the following 2 weeks additional phone calls were made to those organizations which had indicated they would be returning the survey.

This pattern had been pre-tested in a pilot run of the survey. Thirty-three preview letters and survey mailings were sent to an arbitrarily selected group of small and large organizations from most sectors. Because 14 organizations (42.4%) responded to this test with completed surveys the pattern was concluded to be effective.

Survey Design

The questionnaire was developed with the assistance of several people experienced in survey design. It was reviewed by the members of the Advisory Committee and by a number of people in post-secondary institutions and the Ministry of Advanced Education, Training and Technology. The general consensus was that it was a very long survey which would require considerable time and effort to complete. Although some questions from the original design were removed, the survey could not be reduced further without omitting important questions relevant to the goals of the project. The significant response obtained from the pilot run supported the assumption that the survey technique would produce a reasonable response rate.

Confidence Level

Using the basic confidence level formula of

$$\pm Z_{\omega/2} \sqrt{\frac{p(1-p)}{n}}$$

The overall confidence level for the survey results is estimated to be ± 0.06 (6%) 19 times out of 20.

Significance Tests

All of the tables appearing in the Charts were tested for significance using a Chi Square test with an Alpha value of .05. All reported results were significant using this test.

Non-Response Bias

29 completed surveys were returned after 2 or more follow-up phone calls. Given the considerable effort required to convince these organizations to respond, their results were analyzed separately as they could be representative of non-responders. Comparisons of this group and the prior respondents using Chi Square analysis. There was little significant difference between the 2 groups and therefore no identifiable non-response bias.

Verification of the Sample

Given the selective definition of the population, it was difficult to obtain data on the known characteristics of the population against which to compare the sample or the respondents. There was data on the distribution of the size of organizations by number of employees for the largest employment sector, exporters. In comparing this size distribution with the same distribution for respondents, distributions are similar except for large organizations with 200+ employees . Since a special effort was made to include larger organizations this result was expected and results were modified where appropriate to account for this over-representation of large organizations.

Telephone interviews were also conducted with 4 respondents to review their answers and confirm that they were answering questions as intended. Generally, these respondents completed questions as expected although one did not distinguish between entry and advanced level jobs.

APPENDIX 1
Population, Sample and Number of Respondents

Sector	Population	Sampling Method	Sample Size	# of Respondents	Respondents with no I.B.
1A-Exporters	1967	1 in 7 random	250	89	
1B-Large exporters	20	all	20	5	4
2-Importers and Manufactures agents	1102	1 in 12 systematic	90	8	28
3-Trading Houses	108	1 in 2 systematic	36	6	0
4A-Hotels, Resorts, Travel Agents & Convention Services	715	1 in 7 systematic	102	21	10
4B-Hotels	13	all	13	5	0
5-Transportation (rail, air, shipping, trucking)	310	1 in 5 systematic & 5 large	61	25	18
5B-Large Transportation	5	all	5	1	0
6-Customs Brokers, Dealers & Agents	110	1 in 3 systematic	37	8	0
7A-Banks, Investment Dealers, Brokers	149	1 in 3 systematic	50	5	32
7B-Large Banks	8	all	8	5	0
8-Accountants	142	1 in 4 systematic	36	4	14
9-Government and Associations	20	all	20	9	6
10-Crown Corporations	21	all	21	5	6
11-Communications	400	1 in 8 systematic	50	12	10
12-Engineering firms & Consultants with International business	25	all	25	17	
13-Management Consultants with International business	34	1 in 2 systematic	17	6	
14-Environmental Services	64	1 in 3 systematic	21	5	
TOTAL FOR SECTORS 12, 13 & 14				**28**	**20**

APPENDIX 1 Continued
Population, Sample and Number of Respondents

Sector	Population	Sampling Method	Sample Size	# of Respondents	Respondents with no I.B.
15-Japanese Companies operating in B.C.	130	1 in 4 systematic	33	2	
Did not identify themselves				11	
TOTALS	5338		895	249	
Out of business, no correct address,etc.			60		
TOTAL SAMPLE			835		